



Description

The video splicing server is a new generation video splicing server developed for fine-pitch displays and high image quality. It can be used not only as a video processing and video control two-in-one video splicing processor, but also as a pure video splicing processor. The machine adopts a modular configuration and a plug-in structure. The input and output cards can be flexibly configured according to user needs. Based on the powerful hardware FPGA system architecture and modular design concept, it not only features the stable and efficient genetic genes of pure hardware architecture, but also supports various interface modules for flexible and personalized combination, realizing easy maintenance and lower equipment failure rate.

Feature

- * Pure hardware plug-in architecture design, 19-inch standard rack-mounted installation, using 20U metal structure cabinet, the prototype's housing protection class meets the IP20 requirements in GB/T4208-2017;
- * Built-in no less than 7-inch touch screen, which can be used for monitoring status viewing, parameter setting, firmware upgrade, preview echo and other operations;
- * The equipment cabinet supports 160 video inputs and 80 video outputs, with single-link and dual-link input mode switching;
- * A single device supports up to 40 video input cards and 20 video output cards, and supports simultaneous output of video interface output cards and two-in-one network port output cards;
- * A single device can be connected to up to 20 two-in-one network port output cards, and the output can be directly connected to an LED display screen without the need for other equipment;
- * With excellent maintainability design, it supports hot-swap function for input board, output board, preview board, and fan board. The device does not need to be shut down, restarted and set up, and the previous layer data can be quickly restored after replacing the card, so as to ensure the normal playback of the screen, and to realize flexible replacement of cards and convenient maintenance;
- * The system needs to have good compatibility, and the splicer configuration software should at least use Windows, Kirin, IOS, Android, Linux and other operating systems for accessing devices and interactive operations;
- * With FPGA-based pure hardware architecture design, the system runs efficiently and stably, the internal video data transmission adopts matrix bus switching technology. The video bus transmission bandwidth of a single input board is up to 4x6.5Gbps, and the video bus transmission bandwidth of a single output board is up to 16x6.5Gbps;
- * In order to improve the efficiency of equipment troubleshooting, it can monitor equipment temperature, voltage, and fan online status, intelligent identification of board and interface combinations, board and interface status monitoring, and signal loss warning;
- * Support screen background image display; support adding text or picture station logo, text and picture background, position adjustable; support adding OSD text or picture, attribute adjustable;
- * With the built-in B/S splicer configuration software, the firmware upgrade can be completed online, and it also can supports offline import upgrade through U disk. The firmware version is intelligently forward compatible. The upgrade process is safe, stable and fast, with a success rate of up to 100%; the firmware version information of the display device and each card can be refreshed in real time, which is convenient for quickly confirming the upgrade results on site;
- * A single output board has no less than 16 layers, which can realize flexible windowing, superimposition, roaming, and infinite zooming of a single card; it has screen capture, layer settings, layer flipping, and layer freezing;
- * Supports simultaneous preview of all input sources, and the output is capable of echoing all outputs (including IP stream echoing);



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TV-880H20

- * It has hierarchical management and control of user permissions. Super administrators can assign user permissions, enable multiple users to edit, control, and screen operations online at the same time, and can preview other user operations;
- * With real-time and pre-editing modes. Real-time mode can realize real-time on-screen display of screen control. The pre-editing mode supports pre-editing the display content on the software side, and then displays it on the screen.
- * The maximum output video resolution of a single 16-port two-in-one output card is 10240x1016 or 1016x10240. The loading width and height can be set to a maximum value of 10240. When the output frame rate is 60Hz, the maximum pixel loading can be achieved is 10.4 million pixels;
- * The maximum output video resolution of a single 20-network port two-in-one output card is 10752x1220 or 1220x10752. The loading width and height can be set to a maximum value of 10752. When the output frame rate is 60Hz, the maximum 13 million pixel loading can be achieved;
- * The single output interface has 1 background image and 1 OSD superimposed display. The background image has a maximum 8Kx8K display, and the OSD has a 19200x3240 display, and the transparency and position are adjustable; parameters such as font spacing, color, position, transparency, and motion effects can be set, with flexible scaling;
- * With hot-swap input card, output card, and preview card function, no need to shut down the device for restart and setup, after replacing the card, the previous layer data can be restored, and the picture can be played normally;
- * The output interface image quality adjustment has brightness, contrast, saturation, hue, color temperature, and Gamma adjustment. It can add 22 kinds of test picture images, with spacing, speed, and brightness adjustment;
- * With self-check function, including: running status, CPU, EMMC, cross-point communication, memory, voltage, temperature and other state detection;
- * Support adding a station logo (text or picture) to the input image screen, and the background and position of the station logo text and picture can be adjusted;
- * With irregular screen construction, single-card and single-interface screen construction, the maximum 2K DVI and HDMI interface output resolution is 2560x972 or 884x2560, the maximum resolution of single DVI and HDMI output card is 10240x972 or 884x10240;
- * The device can intelligently identify board and interface combinations, and has board and interface status monitoring. If the input source signal is lost, it can proactively report an early warning;
- * The single splicing screen has a background image overlay display. The background image does not occupy layer resources, has renaming settings, and can be zoomed in full screen. A single background image can be displayed at a maximum of 15360x4096;
- * The screen quality adjustment has 4 adjustment modes: standard mode, document mode, conference mode, and video mode. Each mode has an eye protection mode switch setting. When the eye protection mode is turned off, you can adjust the brightness, contrast, saturation, and hue, color temperature, and Gamma for customized adjustment;
- * Support setting 2000 user scenes, realize the scene switching of pictures or videos, with fade-in and fade-out, switching without black screen, and scene calling response speed <60ms;
- * Supports a two-in-one network port output card, can be used with 3D glasses and an external transmitter (built-in 3D source), and can display 3D effects on an external ordinary LED display;
- * Ability to turn on HDR and play video with one click through the menu;
- * Used with a visual management and control platform, wireless control can be performed based on PAD mobile devices, with layer editing, signal replacement, scene saving/retrieval, LED screen brightness adjustment, and picture control;

Specification

Cabinet dimensions	20U
Max number of input cards	40
Max number of input channels	160
Max number of video output cards	20
Max number of output channels	80
Max number of 2-in-1 network port boards supported	20 (inserting a network port card will reduce the number of video input cards or output cards)
Max loading pixels of LED display	260 million
Max number of layers	320 (each output card has a maximum of 16 layers)
GENLOCK	Synchronous lock signal interface, equipped with Bi-Level and Tri-Level
ETHERNET	Gigabit network port, host computer communication interface, connected to router, switch or PC for Web control and software screen configuration
USB×2	USB 2.0 interface, U disk upgrade device program. Import/export all configuration parameters of the device via USB flash drive
RS232 protocol serial port, connected with the central control system, controlled through the central control system	
Voltage	100–240V, 50/60Hz, 10A–5A
Standard power supply	3 (without power redundancy backup)
Power consumption	1800W
Working environment	0°C ~ +45°C, humidity: 0%RH ~ 80%RH, no condensation
Storage environment	-10°C ~ +60°C, humidity: %RH ~ 95%RH, no condensation
Dimension	482.6mm×905.2mm×533.0mm
Weight	47.7kg (net weight)